

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/14471

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B26B21/40 B26B21/14 B29C45/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B26B B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/208907 A1 (CHENVAINU ALEXANDER T ET AL) 13 November 2003 (2003-11-13) paragraph '0035! - paragraph '0044!; figures 1-5 paragraph '0045! - paragraph '0060!; figures 9-14	1
A	US 4 502 217 A (SCHAECHTER FRIEDRICH) 5 March 1985 (1985-03-05) column 1, line 26 - column 2, line 31; figures 1-3 column 5, line 9 - line 15 claims 2,4,6,7	7-10
A	FR 2 805 197 A (BIC SOC) 24 August 2001 (2001-08-24) page 9, line 6 - line 25; figures 1-9	1
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

S document member of the same patent family

Date of the actual completion of the international search

15 July 2004

Date of mailing of the international search report

28/07/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Maier, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT /EP 03/14471

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 333 382 A (BUCHBINDER LIGAYA H) 2 August 1994 (1994-08-02) column 4, line 42 -column 6, line 17; figures 1-8 -----	7,11
A	US 5 067 238 A (MILLER GARY R ET AL) 26 November 1991 (1991-11-26) column 2, line 30 -column 4, line 10; figures 1-9 -----	7
A	US 4 335 508 A (FRANCIS JOHN F ET AL) 22 June 1982 (1982-06-22) column 2, line 30 -column 4, line 32; figures 1-7 -----	1

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/EP 03/14471

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2003208907	A1	13-11-2003	WO	03095159 A1	20-11-2003
US 4502217	A	05-03-1985	AT	387744 B	10-03-1989
			AT	194680 A	15-08-1988
			WO	8102864 A1	15-10-1981
			DE	3141810 C1	18-04-1991
			DE	3141810 D2	19-05-1982
			EP	0049262 A1	14-04-1982
			GB	2085343 A ,B	28-04-1982
			JP	4070040 B	09-11-1992
			JP	57500415 T	11-03-1982
FR 2805197	A	24-08-2001	FR	2805197 A1	24-08-2001
US 5333382	A	02-08-1994	NONE		
US 5067238	A	26-11-1991	AU	8768391 A	28-04-1992
			CN	1060242 A	15-04-1992
			DE	69124523 D1	13-03-1997
			DE	69124523 T2	10-07-1997
			EP	0550676 A1	14-07-1993
			MX	9101300 A1	04-05-1992
			TR	26207 A	15-02-1995
			WO	9205923 A1	16-04-1992
US 4335508	A	22-06-1982	BR	8003234 A	30-12-1980
			CA	1140321 A1	01-02-1983
			DE	3019399 A1	23-04-1981
			FR	2457155 A1	19-12-1980
			GB	2056354 A ,B	18-03-1981
			JP	1477963 C	27-01-1989
			JP	56027290 A	17-03-1981
			JP	63027034 B	01-06-1988
			US	4443940 A	24-04-1984